

Exhibit F

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Page 1

UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY
NEWARK DIVISION

IN RE: PROTON-PUMP) MDL No.
INHIBITOR PRODUCTS) 2789
LIABILITY LITIGATION)
(NO. II)) Honorable

_____) Claire C.
THIS DOCUMENT RELATES TO:) Cecchi

Civil Action No.:)
2:17-cv-06124)
FREDDY BALES,)

Plaintiff,)

V.)

ASTRAZENECA PHARMACEUTICALS)
LP, et al.,)

Defendants.)

_____)
Civil Action No.:)
2:17-cv-02475)
DAVID FOSTER,)

Plaintiff,)

V.)

ASTRAZENECA PHARMACEUTICALS)
LP, et al.,)

Defendants.)

_____)
Civil Action No.:)
2:18-cv-03159)
STEVE KERSCH,)

Plaintiff,)

V.)

ASTRAZENECA PHARMACEUTICALS)
LP, et al.,)
Defendants.)

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Martyn T. Smith, Ph.D.

MONDAY, JUNE 21, 2021

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Page 2	Page 4
<p>1 Civil Action No.:) 2 2:17-cv-00212) 3 KIMBERLY LEE,) 4 Plaintiff,) 5 V.) 6) 7 ASTRAZENECA PHARMACEUTICALS) 8 LP, et al.,) 9 Defendants.) 10 Civil Action No.:) 11 2:17-cv-13727) 12 DIANE NELSON,) 13 Plaintiff,) 14 V.) 15) 16 ASTRAZENECA PHARMACEUTICALS) 17 LP, et al.,) 18 Defendants.) 19 Civil Action No.:) 20 2:19-cv-00850) 21 JAMES RIEDER,) 22 Plaintiff,) 23 V.) 24) 25 ASTRAZENECA PHARMACEUTICALS) LP, et al.,) Defendants.) MONDAY, JUNE 21, 2021 CONFIDENTIAL - PURSUANT TO PROTECTIVE ORDER --- Remote videotaped deposition of Martyn T. Smith, Ph.D., held at the location of the witness Fairfax, California,</p>	<p>1 REMOTE APPEARANCES: 2 3 SEEGER WEISS, LLP BY: JEFFREY S. GRAND jgrand@seegerweiss.com 4 CARLOS F. RIVERA crivera@seegerweiss.com 5 100 Church Street, 8th Floor New York, New York 10007 6 (212) 584-0700 7 and 8 DOUGLAS & LONDON, P.C. BY: BESS DEVAUGHN bdevaughn@douglasandlondon.com 9 59 Maiden Lane, Sixth Floor New York, New York 10038 10 (212) 566-7500 Counsel for Plaintiffs 11 12 ICE MILLER LLP BY: KATHERINE ALTHOFF katherine.althoff@icemiller.com 13 OLGA VOINAREVICH olga.voinarevich@icemiller.com 14 One American Square, Suite 2900 Indianapolis, Indiana 46282 15 (317) 236-2100 Counsel for AstraZeneca Defendants 16 17 18 19 TUCKER ELLIS LLP BY: JAMES W. MIZGALA james.mizgala@tuckerellis.com 20 ANDREA M. PRZYBYSZ andrea.przybysz@tuckerellis.com 21 233 South Wacker Drive, Suite 6950 Chicago, Illinois 60606 22 (312) 624-6300 Counsel for Takeda 23 24 ALSO PRESENT: 25 EMILY SY, Counsel, Takeda</p>
Page 3	Page 5
<p>1 commencing at 8:02 a.m. Pacific Time, on the 2 above date, before Carrie A. Campbell, 3 Registered Diplomat Reporter, Certified 4 Realtime Reporter, Illinois, California & 5 Texas Certified Shorthand Reporter, Missouri 6 & Kansas Certified Court Reporter. 7 --- 8 9 GOLKOW LITIGATION SERVICES 877.370.3377 ph 917.591.5672 fax deps@golkow.com 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25</p>	<p>1 OLIVIA CAMPBELL 2 3 VIDEOGRAPHER: 4 DAN LAWLOR, 5 Golkow Litigation Services 6 --- 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25</p>

2 (Pages 2 to 5)

Golkow Litigation Services - 1.877.370.DEPS

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Page 6		Page 8	
1	INDEX	1	19 "Omeprazole attenuates 240
2	PAGE	2	cisplatin-induced kidney injury
4	APPEARANCES..... 4	3	through suppression of the
5	EXAMINATIONS	4	TRLR4/NF-KB/NLRP3 signalling
6	BY MR. MIZGALA..... 10	5	pathway," Gao, et al.
7	BY MR. GRAND..... 176	6	20 "Reduction in renin release and 244
8	BY MR. MIZGALA..... 183	7	renal vascular resistance by
9	BY MS. ALTHOFF..... 184	8	H+-K+-ATPase inhibition," Lin, et
10	BY MR. GRAND..... 275	9	al.
11	EXHIBITS	10	21 "The relationship between proton 251
12	No. Description Page	11	pump inhibitors and renal disease,"
13	1 Testimony of Martyn T. Smith, Ph.D. 11	12	Morschel, et al.
14	(2016-2021)	13	22 Proton pump inhibitors and vascular 256
15	2 Defendants' Notice of Oral 14	14	function: A prospective cross-over
16	Videotaped Deposition and	15	pilot study," Ghebremariam, et al.
17	Associated Subpoena Duces Tecum of	16	23 "Molecular pathways driving 265
18	Martyn Thomas Smith, Ph.D.	17	omeprazole nephrotoxicity,"
19	3 Statement of Compensation, Martyn 15	18	Fontecha-Barriuso, et al.
20	Smith, Ph.D.	19	(Exhibits attached to the deposition.)
21	4 Declaration of Martyn T. Smith, 22	20	CERTIFICATE.....281
22	Ph.D.	21	ACKNOWLEDGMENT OF DEPONENT.....283
23	5 Exhibit B, Materials Considered by 50	22	ERRATA.....284
24	Expert Dr. Martyn Smith	23	LAWYER'S NOTES.....285
25	6 Dr. Martyn Smith Supplemental 52	24	
	Materials Considered	25	
	7 "Review article: The control of 75		
	gastric acid and Helicobacter		
	pylori eradication," Sachs, et al.		
Page 7		Page 9	
1	8 Preclinical Expert Report 90	1	VIDEOGRAPHER: We are now on
2	Lansoprazole (Long-Term Maintenance	2	the record.
3	Treatment), Takeda Europe	3	My name is Dan Lawlor. I'm a
4	9 "Four-Week Oral Gavage Toxicity 116	4	videographer representing Golkow
5	Study of TAK-390 U-X in Rats,"	5	Litigation Services.
6	Study No. 14-091/SU	6	Today's date is June 21st, and
7	10 "Intrarenal Renin-Angiotensin 135	7	the time is 8:02 a.m.
8	System Involvement in the	8	This remote video deposition is
9	Pathogenesis of Chronic Progressive	9	being held in the matter of Proton
10	Nephropathy-Bridging the	10	Pump Inhibitor Products Liability
11	Informational Gap Between	11	Litigation, MDL number 2789.
12	Disciplines," Obert, et al.	12	All parties to this deposition
13	11 FDA Epidemiology Literature Review 166	13	are appearing remotely and have agreed
14	12 Prevacid 2020 label 172	14	to the witness being sworn in
15	13 "Late Consequences of Acute 214	15	remotely.
16	Ischemic Injury to a Solitary	16	Due to the nature of remote
17	Kidney," Pagtalunan, et al.	17	reporting, please pause briefly before
18	14 "Renal ischemic injury results in 216	18	speaking to ensure all parties are
19	permanent damage to peritubular	19	heard completely.
20	capillaries and influences	20	The deponent is Martyn Thomas
21	long-term function," Basile, et al.	21	Smith, Ph.D.
22	15 "Acute unilateral ischemic renal 217	22	Counsel will be noted on the
23	injury induces progressive renal	23	stenographic record.
24	inflammation, lipid accumulation,	24	The court reporter is Carrie
25	histone modification, and end stage	25	Campbell and will now swear in the
	kidney disease," Zager, et al.		
	16 "Renal response to repetitive 218		
	exposure to heme proteins: Chronic		
	injury induced by an acute insult,"		
	Nath, et al.		
	17 "The Intrarenal Renin-Angiotensin 222		
	System: From Physiology to the		
	Pathobiology of Hypertension and		
	Kidney Disease," Kobori, et al.		
	18 "Role of renin-angiotensin system 237		
	in acute kidney injury-chronic		
	kidney disease transition," Chou,		
	et al.		

Confidential - Pursuant to Protective Order

Page 134	Page 136
<p>1 Right?</p> <p>2 A. Right.</p> <p>3 Q. Okay. That work group made no</p> <p>4 mention of CPN in rodents in its report,</p> <p>5 right?</p> <p>6 A. Well, I think it's focused on</p> <p>7 the human, not --</p> <p>8 Q. Right.</p> <p>9 A. -- {audio interruption}</p> <p>10 specifically look at it to whether it</p> <p>11 mentioned CPN in rodents.</p> <p>12 Q. Okay. Okay. Paragraph 45 --</p> <p>13 page 45, I'm sorry. Paragraph 105.</p> <p>14 "Relatively recently, the mechanism of CPN</p> <p>15 induction in rats has become apparent and has</p> <p>16 been shown to involve alteration of the</p> <p>17 renin-angiotensin system, open paren, RAS,</p> <p>18 close paren, in the kidney."</p> <p>19 And you cite Obert and Frazier,</p> <p>20 correct?</p> <p>21 A. Correct.</p> <p>22 Q. Doctor, you're aware that</p> <p>23 misstates what the authors said in that</p> <p>24 article, right?</p> <p>25 MR. GRAND: Objection.</p>	<p>1 say here.</p> <p>2 Q. Okay. Did you read this whole</p> <p>3 article, Doctor?</p> <p>4 A. I've read this article several</p> <p>5 times.</p> <p>6 Q. Okay. So let's go to the</p> <p>7 introduction.</p> <p>8 A. Okay.</p> <p>9 Q. Right there.</p> <p>10 It says, "Chronic progressive</p> <p>11 nephropathy, CPN, is the most commonly</p> <p>12 encountered spontaneous background finding in</p> <p>13 laboratory rodents."</p> <p>14 That's true, correct?</p> <p>15 A. Yeah.</p> <p>16 Q. Okay. "Chronic progressive</p> <p>17 nephropathy has been reviewed extensively</p> <p>18 over the past 40 years, yet its pathogenesis</p> <p>19 remains controversial."</p> <p>20 And that's correct, right?</p> <p>21 A. Yeah. It was in 2019, yeah.</p> <p>22 Q. Is it any different now?</p> <p>23 A. Well, I think this article</p> <p>24 clears up some of the pathogenesis, so I</p> <p>25 think this vastly improves our understanding</p>
Page 135	Page 137
<p>1 Foundation.</p> <p>2 THE WITNESS: I don't believe</p> <p>3 so.</p> <p>4 (Smith Exhibit 10 marked for</p> <p>5 identification.)</p> <p>6 QUESTIONS BY MR. MIZGALA:</p> <p>7 Q. Okay. Let's pull up 2019 Obert</p> <p>8 and Frazier, please. The last sentence of</p> <p>9 the abstract.</p> <p>10 Okay. What these authors said</p> <p>11 was, "Intrarenal RAS alterations seem to be</p> <p>12 central to all these events and may be</p> <p>13 critical to CPN development and progression."</p> <p>14 Right?</p> <p>15 A. Yeah.</p> <p>16 Q. Okay. That's different from</p> <p>17 induction, right, Doctor?</p> <p>18 A. Well, CPN development is</p> <p>19 induction, isn't it, and then progression</p> <p>20 onwards? So without being induced, it's not</p> <p>21 going to be developed, is it?</p> <p>22 Q. Well, we'll keep going through</p> <p>23 this paper, so --</p> <p>24 A. I think my wording is pretty</p> <p>25 much accurate and reflects exactly what they</p>	<p>1 of it.</p> <p>2 Q. Okay. "It occurs in both male</p> <p>3 and female rats, but at a higher incidence</p> <p>4 and severity in males, and a similar syndrome</p> <p>5 in noted in several mouse strains."</p> <p>6 And that's true, right?</p> <p>7 A. That is true.</p> <p>8 Q. Okay. And then it says, "In a</p> <p>9 retrospective review of GlaxoSmithKline</p> <p>10 toxicity studies, incidence rates varied</p> <p>11 widely among studies, by strain and with age,</p> <p>12 in both rats and mice."</p> <p>13 That's true?</p> <p>14 A. Well, I don't know if that's</p> <p>15 true because I don't have the ability to</p> <p>16 review GlaxoSmithKline studies. But it's my</p> <p>17 understanding that the incidence rates varies</p> <p>18 very widely amongst strains and can vary</p> <p>19 widely amongst different laboratories.</p> <p>20 Q. Okay. The next sentence.</p> <p>21 "Other investigators report incidences</p> <p>22 approaching 100 percent in some strains after</p> <p>23 two years, including wild rat strains."</p> <p>24 Is that true?</p> <p>25 A. I don't know. I didn't know</p>

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<p style="text-align: right;">Page 278</p> <p>1 part of the body but actually demonstrate 2 oxidative stress in other parts of the body? 3 A. Yeah. There are a lot of drugs 4 that have antioxidant properties. For 5 example, hydroquinone, which is -- produces 6 renal tumors in rats and is also a metabolite 7 of benzene, is actually used as an 8 antioxidant in chemistry, in polymers, and 9 has wildly known antioxidant properties, and 10 yet it exacerbates and cause renal tumors and 11 can promote oxidative stress in various 12 tissues of the body. 13 So just because something is an 14 antioxidant in a chemistry-type system 15 doesn't mean to say that it will be 16 protective in the body against oxidative 17 stress. 18 Similarly, for inflammation, 19 you can have something that blocks 20 inflammation that can also exacerbate kidney 21 injury. I mean, a great example of this, of 22 course, is ibuprofen and various NSAIDs 23 which, by their very nature, are designed to 24 be anti-inflammatory, and yet they produce 25 acute interstitial nephritis in some people,</p>	<p style="text-align: right;">Page 280</p> <p>1 a study like that is not statistically 2 significant, you can't rule out those results 3 for just the result of chance, correct? 4 A. Yeah, they don't really add 5 very much to the literature because they are 6 underpowered and really don't give you much 7 information, because it's too easy to 8 discount them based on their size and their 9 duration. 10 MR. GRAND: Thank you, Doctor. 11 I have no other questions. 12 MS. ALTHOFF: Nothing further 13 for me. 14 VIDEOGRAPHER: Okay? 15 Everybody? 16 Perfect. This concludes 17 today's deposition. We are going off 18 record. The time is 2:43. 19 (Off the record at 2:43 p.m.) 20 ----- 21 22 23 24 25</p>
<p style="text-align: right;">Page 279</p> <p>1 which is an inflammatory condition. 2 And so just because something 3 shows anti-inflammatory properties in a petri 4 dish or an experimental study or is an 5 antioxidant doesn't mean to say that it will 6 do so in particular organs of the body and 7 often can have directly the opposite effect. 8 Q. And do you recall being shown a 9 study of PPIs in humans? I believe it was 10 one of the last studies you were shown today, 11 and I think it had approximately 21 patients 12 and lasted for four weeks. 13 Do you recall that? 14 A. Yes, that's the long name, 15 Ghebremariam or something like that, who 16 published the paper in 2013 that I cited. 17 And counsel showed me that paper from 2015, 18 which was a human follow-up study, which was 19 only short in nature and only had ten -- 10 20 or 11 patients in each group. 21 And although they saw some 22 effects, they were not statistically 23 significant, which is probably not surprising 24 given the limitations of that study. 25 Q. And if a study isn't sig -- if</p>	<p style="text-align: right;">Page 281</p> <p>1 2 CERTIFICATE 3 I, CARRIE A. CAMPBELL, Registered 4 Diplomat Reporter, Certified Realtime 5 Reporter and Certified Shorthand Reporter, do 6 hereby certify that prior to the commencement 7 of the examination, Martyn T. Smith, Ph.D., 8 was duly sworn by me to testify to the truth, 9 the whole truth and nothing but the truth. 10 I DO FURTHER CERTIFY that the 11 foregoing is a verbatim transcript of the 12 testimony as taken stenographically by and 13 before me at the time, place and on the date 14 hereinbefore set forth, to the best of my 15 ability. 16 17 I DO FURTHER CERTIFY that I am 18 neither a relative nor employee nor attorney 19 nor counsel of any of the parties to this 20 action, and that I am neither a relative nor 21 employee of such attorney or counsel, and 22 that I am not financially interested in the 23 action. 24 25 CARRIE A. CAMPBELL, NCRA Registered Diplomat Reporter Certified Realtime Reporter California Certified Shorthand Reporter #13921 Missouri Certified Court Reporter #859 Illinois Certified Shorthand Reporter #084-004229 Texas Certified Shorthand Reporter #9328 Kansas Certified Court Reporter #1715 Notary Public Dated: June 30, 2021</p>

71 (Pages 278 to 281)

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Page 282	Page 284
<p>1 INSTRUCTIONS TO WITNESS</p> <p>2</p> <p>3 Please read your deposition over</p> <p>4 carefully and make any necessary corrections.</p> <p>5 You should state the reason in the</p> <p>6 appropriate space on the errata sheet for any</p> <p>7 corrections that are made.</p> <p>8 After doing so, please sign the</p> <p>9 errata sheet and date it. You are signing</p> <p>10 same subject to the changes you have noted on</p> <p>11 the errata sheet, which will be attached to</p> <p>12 your deposition.</p> <p>13 It is imperative that you return</p> <p>14 the original errata sheet to the deposing</p> <p>15 attorney within thirty (30) days of receipt</p> <p>16 of the deposition transcript by you. If you</p> <p>17 fail to do so, the deposition transcript may</p> <p>18 be deemed to be accurate and may be used in</p> <p>19 court.</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	<p>1 -----</p> <p>2 ERRATA</p> <p>3 -----</p> <p>4 PAGE LINE CHANGE</p> <p>5 _____</p> <p>6 _____</p> <p>7 _____</p> <p>8 _____</p> <p>9 _____</p> <p>10 _____</p> <p>11 _____</p> <p>12 _____</p> <p>13 _____</p> <p>14 _____</p> <p>15 _____</p> <p>16 _____</p> <p>17 _____</p> <p>18 _____</p> <p>19 _____</p> <p>20 _____</p> <p>21 _____</p> <p>22 _____</p> <p>23 _____</p> <p>24 _____</p> <p>25 _____</p>
<p>Page 283</p> <p>1 ACKNOWLEDGMENT OF DEPONENT</p> <p>2</p> <p>3</p> <p>4 I, _____, do</p> <p>5 hereby certify that I have read the foregoing</p> <p>6 pages and that the same is a correct</p> <p>7 transcription of the answers given by me to</p> <p>8 the questions therein propounded, except for</p> <p>9 the corrections or changes in form or</p> <p>10 substance, if any, noted in the attached</p> <p>11 Errata Sheet.</p> <p>12</p> <p>13 _____</p> <p>14 Martyn T. Smith, Ph.D. DATE</p> <p>15</p> <p>16 Subscribed and sworn to before me this</p> <p>17 _____ day of _____, 20 ____.</p> <p>18 My commission expires: _____</p> <p>19 Notary Public</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	<p>1 -----</p> <p>2 LAWYER'S NOTES</p> <p>3 -----</p> <p>4 PAGE LINE</p> <p>5 _____</p> <p>6 _____</p> <p>7 _____</p> <p>8 _____</p> <p>9 _____</p> <p>10 _____</p> <p>11 _____</p> <p>12 _____</p> <p>13 _____</p> <p>14 _____</p> <p>15 _____</p> <p>16 _____</p> <p>17 _____</p> <p>18 _____</p> <p>19 _____</p> <p>20 _____</p> <p>21 _____</p> <p>22 _____</p> <p>23 _____</p> <p>24 _____</p> <p>25 _____</p>